

## Functions

- The device enables an expression pedal to drive three separate effects units or keyboards with control inputs
- Each output can be turned ON or OFF independently.
- The device enables an expression pedal to drive a 5 pin DIN MIDI input
- MIDI is turned on and off via P2, or on permanently as set by switch S1-1
- The sweep direction for each output can be reversed independently
- The depth for each output can be set to stay at the one position regardless of movement of the connected expression pedal by turning the switch off
- The minimum and maximum range within an expression pedals sweep can be set independently for all outputs
- The device outputs 0 – 4 volts at 2mA for driving control voltage inputs. Choose CV polarity for this. Note that most devices do not use CV

The device is polarity and resistance compatible with all effect units, keyboards and MIDI controllers with expression sockets or with CV sockets.

## Use

- 9 – 12 volt power – Any certified 9 – 12 volt power supply with a minimum supply current of 50mA is suitable
- Pedal Input – A TRS or RTS expression pedal with an electrical resistance between 10 – 250kohms is suitable.
- Output 0, 1 & 2 - selectable for TRS, RTS, TS & CV via dip switches
- Output 0, 1 & 2 - selectable 10k ohm or 50kohm
- Output 0, 1 & 2
  - ON/OFF– Output is turned ON & OFF with alternate presses of the momentary switch
  - Set sweep length - Hold pedal in start position > Hold switch until LED flashes > move pedal to end position > Release switch > the sweep length is now set
  - Set minimum & maximum depth – Set pedal at minimum depth required > Remove power > Hold switch, connect power on & do not release switch > Move pedal to maximum depth required > Release switch. The minimum & maximum depth is now set.
- Power ON/OFF indicator – Illuminates when power is applied
- Output 0 indicator – Illuminates when output 0 is active
- Output 1 indicator – Illuminates when output 1 is active
- Output 2 indicator – Illuminates when output 1 is active

*\*Sweep length must be set before setting minimum & maximum depth. Setting sweep length will reset minimum & maximum depths to default settings*

## Reset

Reset the device by applying power whilst holding switches switch 0 and switch 2. All settings will be erased and the device is reset to factory default settings.

## Specifications

- 9 – 12 volt; Negative centre (tip)
- Current draw 25mA
- Selectable Electrical output resistance 10Kohm or 50kohm
- Jack type- ¼" (6.35mm) stereo (input & output)
- Selectable Polarity - TRS, RTS, TS, RS or CV (0 – 4v; 2mA maximum)
- Input Polarity – TRS or RTS
- 127 step sweep resolution
- Linear output sweep
- MIDI – selectable for pitch wheel, after touch, CC – 0, 1, 4, 7, or 11

## Configuration

The device, set as supplied, will suit most expression pedals. A few brands such as Line 6, Yamaha, Behringer, Digitech and Zoom, may require changing settings. But even when set incorrectly, it works well, albeit with a reduced sweep range. See the following link for matching effect units with expression pedal variables.

<http://www.expressionpedals.com/matching-pedal-brand-to-effect-brand>

### S1 – Electrical Resistance of outputs and MIDI control

	1	2	3	4	5
ON	MIDI always on	NA	Output 0 10Kohms	Output 1 10Kohms	Output 2 10Kohms
OFF	MIDI ON/OFF via switch P2	NA	Output 0 50kohms	Output 1 50kohms	Output 50kohms

### S2 – Pedal Input polarity

	1	2	3	4
TRS	ON	OFF	ON	OFF
RTS	OFF	ON	OFF	ON

### S3 – Output 0 polarity

	1	2	3	4	5
TRS	ON	OFF	ON	OFF	OFF
RTS	OFF	ON	OFF	ON	OFF
TS	OFF	OFF	ON	ON	OFF
CV	ON	OFF	ON	OFF	ON

### S4 – Output 1 polarity

	1	2	3	4	5
TRS	ON	OFF	ON	OFF	OFF
RTS	OFF	ON	OFF	ON	OFF
TS	OFF	OFF	ON	ON	OFF
CV	ON	OFF	ON	OFF	ON

### S5 – Output 2 polarity

	1	2	3	4	5
TRS	ON	OFF	ON	OFF	OFF
RTS	OFF	ON	OFF	ON	OFF
TS	OFF	OFF	ON	ON	OFF
CV	ON	OFF	ON	OFF	ON

### S6 – MIDI CC

	1	2	3
Pitch Wheel	ON	ON	ON
After touch	OFF	ON	ON
0	ON	OFF	ON
1	OFF	OFF	ON
4	ON	ON	OFF
7	OFF	ON	OFF
11	OFF	OFF	OFF

### S7 – Auto oscillation – Not implemented

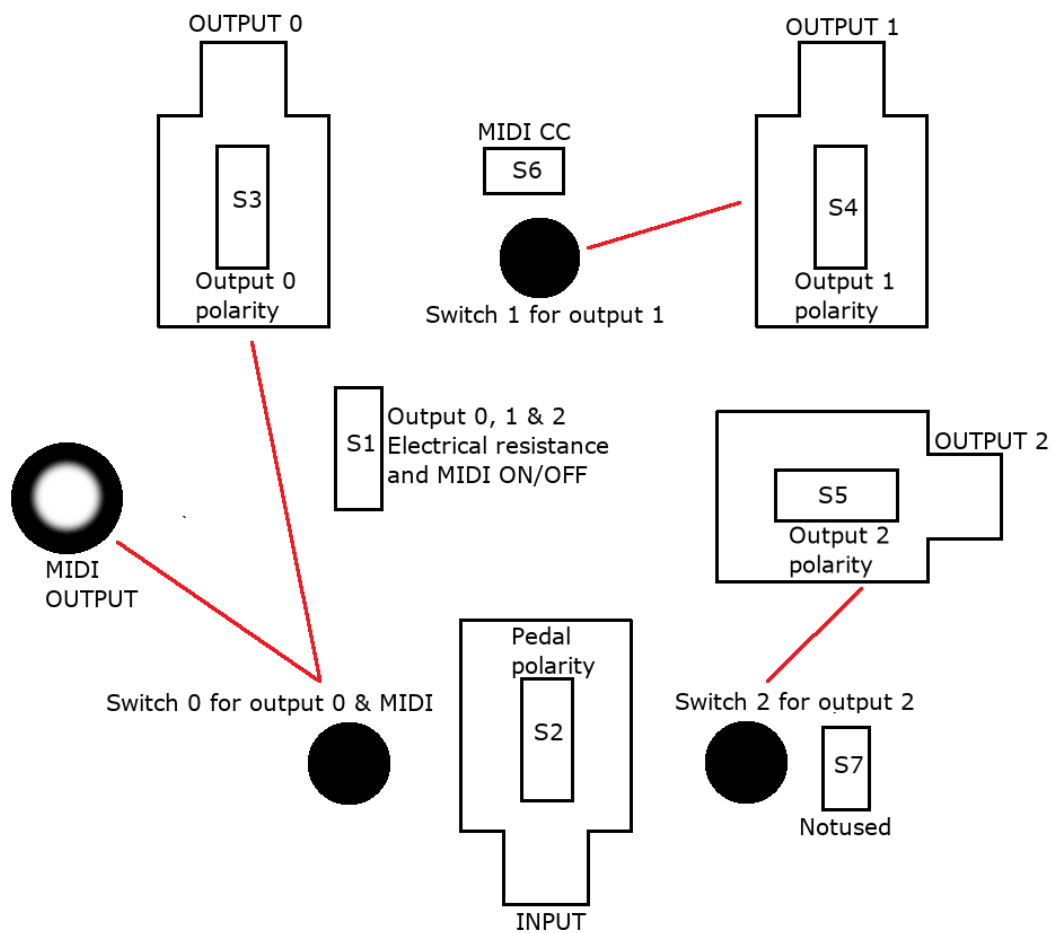


Figure 1 Bottom view



Figure 2 – Top view